5. An atlas of common eye disorders.

Each section treats its subject thoroughly and well. The portion on clinical practice is by far the most comprehensive and detailed in presentation. The illustrations, format and printing are uniformly excellent.

DAVID O. HARRINGTON, M.D.

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ATLAS OF NUCLEAR MEDICINE—Volume 1—Brain—Frank H. Deland, M.D., Assistant Professor of Radiology, Johns Hopkins Medical Institutions; and Henry N. Wagner, Jr., M.D., Professor of Radiology and Radiological Science, Associate Professor of Medicine, Johns Hopkins Medical Institutions; with the assistance of Wendy A. North, M.I.R., Research Assistant, Johns Hopkins Medical Institutions. W. B. Saunders Company, West Washington Square, Philadelphia, Pa. (19105), 1969. 217 pages, $18.00.

The first atlas of nuclear medicine published appears to be in a "hard act to follow" category. Doctors Deland and Wagner and their several assistants who cooperated in the technical, artistic, and photographic preparation of the material in this volume are to be congratulated on their generally effective presentation. Gamma images are presented with pertinent anatomic, physiologic and pathologic supporting information. All case material is presented with a brief clinical description, diagnostic impressions prior to radiopharmaceutical distribution imaging, and a description of the gamma images with their interpretation. Subsequent course and final diagnosis are then presented. This strong clinical orientation should prove to be particularly useful for the student surveying brain imaging procedures.

The particularly effective sections on cerebrovascular diseases, posterior fossa tumors, and cisternography should be read by any serious student of nuclear medicine techniques. The section on cerebrovascular diseases is notably well conceived and often original, identifying more specific vascular localization of labeling abnormalities than is usually accomplished with scanning or gammaphotography techniques.

The authors' foreword states that the purpose of the atlas is "to portray the images obtained by scanning." My major criticism would be to note the lack of sufficient information on scintiphotography or gammaphotography. There are relatively few scintiphotos illustrated and few of those illustrated are shown in the conventional Polaroid format of white information on a black background. Most of the gammaphoto illustrations are shown as negative exposures with black information on a white background. This also provides a broader exposure range and less inherent background cutoff in the film than with Polaroid film. A major deficiency of the atlas, in my opinion, is the complete lack of any information on cerebral angiography and perfusion imaging studies with radiopharmaceuticals. The gamma camera has certainly made very definite contributions in this area, providing a safe and readily performed angiographic type study which contributes materially to the diagnosis of the subsequent static scintiphotos or scans. In line with the authors' emphasis on scanning, all the gamma images are presented in a format which is larger than is justified by the information density in the images and the reader's arm length. Image minification is a well established technique of improving diagnostic efficiency in nuclear medicine and smaller images would seem appropriate for this atlas. Presentation of the larger pictures has required that many comparison views be eliminated, and this is a drawback, since comparison views are so much a part of gamma image interpretation, both for scans and for gammaphotos. Conventional scans are generally presented as high contrast images with appreciable background cutoff so as to emphasize pathologic details. This is entirely suitable for an atlas and allows ready identification of abnormalities in most of the illustrations.

It was a pleasant surprise to see that Doctor Wagner has lessened somewhat his initial resistance to clinical use of gammaphotography as a basic technique for acquiring radioisotope distribution data *in vivo*. I would predict that the next edition of this atlas will include dynamic scintillation camera studies and will give increasing attention to scanning techniques that employ very sharply focused collimation with narrow range of focal depth to produce scans which are more planographic than those that are customarily used for screening for intracranial lesions at present. This text is a major contribution to teaching brain scan (and gammaphoto) interpretation and will serve our students well.

MALCOLM R. POWELL, M.D.

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ALCOHOL AND THE IMPAIRED DRIVER—A MANUAL ON THE MEDICOLEGAL ASPECTS OF CHEMICAL TESTS FOR INTOXICATION—Committee on Medicolegal Problems, American Medical Association. American Medical Association, 535 North Dearborn Street, Chicago, Ill. (60610), 1968. 234 pages, $1.50 per copy (with discounts on orders for 16 or more).

In 1965 the 80,000,000 automobiles in the United States were involved in accidents that killed 49,000 persons and injured 3½ milion persons. Based on these figures the predicted 113,642,000 cars in 1975 will kill 75,000 persons and injure over five million. Up to 50 percent of these accidents are related to the use of alcohol. These grim statistics do and will continue to involve the time and energies of the medical profession. It is imperative that physicians learn more about alcoholism and its relationship to auto accidents. This book answers many questions in this field and points the direction medicine, society and the law must go in the years ahead.

Some drivers are impaired with a blood level of 0.04 percent, most are impaired at 0.08 percent. At levels of 0.10 percent there is severe, significant and dangerous deterioration in driving abilities. Alcohol levels in the body may be tested by sampling blood, breath or urine. These are the most commonly tested materials although alcohol may be measured in saliva, vomitus, cerebrospinal fluid, stomach contents, or body tissues. Alcohol is eliminated from the body at a constant rate. There is no way to speed up detoxification. Central nervous system depressants such as tranquilizers, narcotics, or barbiturates potentiate the effect of alcohol.

In 1939 the American Medical Association stated that blood levels under 0.05 percent did not indicate drunkeness while levels of 0.15 percent did indicate that the person was under the influence of alcohol. Blood levels between 0.05 percent and 0.15 percent might or might not indicate that the individual was under the influence of alcohol, depending on other factors. However since 1960 the American Medical Association has held that blood levels of 0.10 percent be accepted as prima facie evidence of alcoholic intoxication, recognizing that many individuals are under the influence of alcohol in the 0.05 percent to 0.10 percent range. In 1962 the American Medical Association recommended that reporting of alcohol concentration in the blood be on the basis of milligrams of alcohol per 100 milliliters of blood. Thus 0.05 percent is 50 milligrams per 100 milliliters (50mg/100ml).

The National Highway Safety Act of 1966 requires the states to evaluate the relationship between alcohol and auto accidents including laws, enforcement methods, treatment of alcoholism and other aspects. In most states a blood level of 0.15 percent is presumptive of alcoholism: 11 have set the presumptive level at 0.10 percent and

Utah has established 0.08 percent as the presumptive level. Many of the states have implied consent laws whereby the driver who refuses to submit to chemical tests in circumstances where the test is authorized may have his license to drive suspended or revoked.

While many drivers involved in driving acicdents have high blood alcohol levels, young, inexperienced drivers may have accidents with low blood levels. It is estimated that one-third of United States adults will drink and drive at some time during the year. The average person attending a cocktail party rarely has a blood alcohol level over 0.05 percent. However, two or more drinks taken in less than an hour may elevate the blood alcohol to the level of legal intoxication. The over-eager host pushing drinks on his guests may grossly impair their driving skill and inadvertently lead to arrest for drunken driving.

This small book contains a wealth of information for a very nominal sum. It includes chapters on Alcohol and Traffic Safety, Acute Alcoholic Intoxication, Pharmacology and Toxicology of Alcohol, Effect of Alcohol on the Nervous System, Effect of Alcohol on Driving Ability, Chemical Tests, Measures for Control of Drinking Drivers, Medical-legal Aspects, Constitutional Aspects of Chemical-test Evidence, Medical-legal Aspects of Chemical Tests and an appendix of court decisions and scientific references.

As a reference book on drinking and driving it is clearly the best available. For any physician who wishes factual material on this subject it is highly recommended.

ALFRED AUERBACK, M.D.

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REVIEW OF MEDICAL PHAMACOLOGY—Frederick H. Meyers, M.D., Professor of Pharmacology, University of California School of Medicine, San Francisco; Ernest Jawetz, Ph.D., M.D., Professor of Microbiology, Chairman, Department of Microbiology, Professor of Medicine, Lecturer in Pediatrics, University of California School of Medicine, San Francisco; and Alan Goldfien, M.D., Professor of Medicine and Obstetrics and Gynecology, University of California School of Medicine, San Francisco. Lange Medical Publications, Drawer L, Los Altos, Ca. (94022), 1968. 692 pages, $8.00.

There is something very special and satisfying about a book produced by Lange Medical Publications. The characteristic double-colums of print of the larger volumes are pleasing to the eye, and the concise detailed information that packs the pages provides an extraordinary amount of detail. Useful and original compilations of data ensure the value of these books as reference works, and the usually flowing style of writing allows easy reading.

This review of pharmacology provides full measure of these excellent qualities, and the multiple authorship has been welded into a homogeneous continuum. The prevailing attitude of scepticism directed at manufacturer's claims is a welcome approach that the authors have adopted to provide guidance in drug selection from the cornucopia of pharmacological products.

The coverage of topics is adequate and contains valuable features such as the excellent section on drug abuse and habituation, and the appendix tables listing the effects of drugs on common clinical laboratory procedures, and the drugs hazardous for use during pregnancy. An unevenness creeps into the policy regarding the completeness of bibliographical references which vary from superabundant (Chapter 60) to miserly (the chapters on antibiotics). Occasional statements are unnecessarily provocative and pass undocumented, such as "the claim that diphenylhydantoin causes pulmonary fibrosis has not been confirmed" (page 316).

The authors frequently indulge their interests in a personal way, as in the section on alcoholism, and fall repeatedly into the trap of straying from pharmacology into technical therapeutics as in the over-detailed description of precautions to take during lumbar puncture (page 228). A contrasting, and more serious, fault is found in many sections where there is insufficient practical information to help the reader select a particular drug formulation: thus in the discussion on antacids, it would have been valuable to have contrasted the electrolyte contents of the alternatives listed, and in the discussion on digitalis more specific guidance should have been included on the advantages of different digitalizing and maintenance regimens. This book has to compete with the Lange text on Diagnosis and Treatment, and a contrasting approach to therapy should have been accorded to emphasize the pharmacological basis of drug selection: too often this text on Medical Pharmacology resembles its well-established competitor. Numerous examples of the inadequacies of this review could be cited: thus intravenous colchicine is not mentioned, the various available preparations of PAS are not detailed, and so on.

Some of the best chapters are those on drugs acting on the central nervous system; some of the poorer discussions are those where physiological principles should have been invoked as a basis for the pharmacological approach, as in the sections on shock and fluid balance which are both inferior. The most disappointing chapters are those on antibiotics, where descriptions of drugs are often inadequate (e.g., cephaloridine, gentamicin). Specific faults in these chapters could be mentioned, e.g., the advised dose of colistin (page 513) is inadequate; the chapter on penicillins fails to detail the precise advantages of the different preparations, and does not discuss the use of pencillinase; the dosage of intramuscular tetracyclines is not clearly stated. The chapter on Chemoprophylaxis is interesting, but it is surely misplaced in a text on pharmacology. The last two chapters in the section on chemotherapeutic agents are contributions on antiprotozoal and anthelmintic drugs, and are excellent.

Many other individual faults in this text could be cited in detail, but few are serious. Definite errors are not readily found, and the printing mistakes detected were limited to the mis-spelling of Sharpey-Schafer's name (page 231), the failure to include footnote 5 following Table 46-1, and the omission of the Chapter reference to RTF (page 505). A more serious fault is the tendency to include large diagrams which contribute nothing but length to the book, e.g., Figs. 6-1, 9-1, 37-1, 37-2.

The ultimate questions concerning this book are whether it was necessary, and who should buy it? Undoubtedly, it provides a very good guide to therapeutics, but it falls short of being an adequate reference book, which is a major requirement for any physician faced with the daily problems of practical drug dosage, indications, contraindications and side-effects. For the student or practitioner who already possesses the Lange series of texts on medicine and therapeutics, this new publication would be somewhat superfluous, since there are so many areas of overlap with the former books. However, if one finds Goodman and Gilman too indigestible, and Current Diagnosis and Treatment is not in one's library, then the $8.00 that this review costs will be well-spent not only by medical students, but also by qualified practitioners who wish to own an excellent, readable and reliable guide to the application of pharmacology to clinical medicine. If the next edition contains more detailed, critical guidance to drug selection and more emphasis on the problems of contraindications and side-effects (preferably in tabular form), then it will surely come to meet as wide an ownership in personal libraries as any other text of practical pharmacology.

IRWIN ZIMENT, M.B., M.R.C.P.